

particular than some others are). Most of the shortcomings are not peculiar to this paper by any means, but are merely manifestations of widespread modern tendencies, due largely to excessive specialization in education and a growing indifference to matters not directly in one's line; and for some of them the author can hardly be held responsible at all. Others are points which will probably be given more attention in the future than they have in the past. The principal ones are:

Using too many different serial numbers on cover or title-page, one of them Roman (a sort of notation which has outlived its usefulness).

Dating the publication falsely, and thus working an injustice to any one who may have published something similar between the alleged date and the real date.

Omitting dates from illustrations (where they are just as useful as on herbarium labels, etc.).

Carelessness in spelling and proof-reading.

Using the terms "region" and "ecology" too loosely.

Too few comparisons with other parts of the world and citations of previous literature.

Insufficient explanation of the methods of treatment.

Too little correlation of vegetation with soil.

Lack of quantitative figures for vegetation.

Assuming that species treated as native in floras of the northeastern United States must be indigenous in every part thereof, even where the habitat indicates otherwise.

Too great discrepancy between ecological and taxonomic parts, in number of species included.

Using fictitious common names, which appear to serve no useful purpose, and take up space which might be better occupied with information about habitats or other significant facts.

Decapitalizing specific names, and thus obliterating certain interesting etymological distinctions without benefiting the reader appreciably.

ROLAND M. HARPER

**Hitchcock's Text-book of Grasses\***

This is one of the Rural Text-book Series, edited by Professor L. H. Bailey. The work is divided into two parts, the first treating of the economic side of the subject, the second of systematic agrostology. The first part includes ten chapters, the first chapter an introduction. Then follow chapters on: economic

\* A Text-book of Grasses. With especial reference to the economic species of the United States. By A. S. Hitchcock, systematic agrostologist, U. S. Dept. of Agriculture. Pp. 1-276. Illustrated. The Macmillan Co., N. Y. 1914. Price \$1.50.

classification of grasses; forage plants; cultivated pastures; meadow plants; hay and green feed; lawns; grasses used for miscellaneous purposes; weeds; grass crop areas. The second part comprises fifteen chapters, the first two treating of the morphology of the vegetative and floral organs. There are also interesting chapters on ecology and taxonomy or classification. The next ten chapters take up the grass tribes, a chapter to each, while the concluding chapter is on nomenclature. A large amount of information in reference to hay and pasture grasses is brought together in a condensed form, making it readily available. The chapter on lawns gives the essentials in the preparation of the soil for a good lawn, and the best grasses to be used in different regions. It should prove very helpful.

Grass organs are clearly described, a great help to those uninformed on technical terms often found in works on grasses. The chapter on ecology is full of interesting information on seed dispersal, plant societies, habitats, and geographic distribution. The second part also includes keys to the tribes and genera concerned in the work. The whole is illustrated with sixty-three figures, adding much to its value.

In the field it is intended to cover it meets a decided want, and should be fully appreciated by those interested.

GEORGE V. NASH

**Murrill's Northern Polypores\***

This is the first of a series of four manuals on the polypores of North America. The present volume covers the species occurring in eastern Canada and the northern United States south to the southern boundaries of Virginia, Kentucky, Missouri and Kansas and west to the western boundaries of Kansas, Nebraska and the Dakotas.

\* The volume contains complete keys and descriptions of all the species known in this region, with index to the genera with species and also an alphabetical index to the species. The general style of the book is that of North American Flora, but in order to make the work more condensed all synonyms have been eliminated.

\* Murrill, Wm. A. Northern Polypores. Pp. i-iv + 64. Privately published. December, 1914. Price \$1.00, postpaid.